REMOTE SENSING OF OCEAN CURRENT BOUNDARY LAYER

January 1975
Contract Number T-4713-B

Principle Investigations Management Office
Lyndon B. Johnson Space Center

Z. H. Byrns, Technical Monitor

George A. Maul, Principle Investigator
National Oceanic & Atmospheric Administration
Atlantic Oceanographic and Meteorological Laboratories

MONTHLY REPORT

U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
ENVIRONMENTAL RESEARCH LABORATORIES

ATLANTIC OCEANOGRAPHIC AND METEOROLOGICAL LABORATORIES
15 RICKENBACKER CAUSEWAY, VIRGINIA KEY
MIAMI, FLORIDA 33149

Date : February 21, 1975 Refer to: RH1000 31M 48.03

From : George A. Maul

To : Distribution List

Subject: Monthly Progress Report, T-4713-B

This is the ninteenth report on project EREP 108, which covers the month of January 1975.

Using the ground-truth profile data, the radiative transfer equation for infrared radiation (7-13 μm) was solved. The spectral results at the top of the atmosphere observed at the time of the experiment are now ready for comparison with the S191 and other atmospheric transmittance models.

Surface irradiance ratios are in the process of being filtered for sea surface effects. Ocean waves impose a strong signal that modulates the upwelling light due to specular reflection. Efforts to this date have not been successful in filtering out this component because the spectrum is non-ergodic.

Receipt of the S192 data is acknowledged. This data does not cover the zone where the current boundary is and is not usefull unless that data is provided. This fact was made clear to NASA by telecon with Bill Johnson. Please note that the scanner data must be provided as far south as 23° 33.2'N at 81° 55.5'W in order to fulfill that part of the contractual study.

Recipients of the financial report are marked by an asterisk on the attached distribution list.